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ABSTRACT

This study compared the sociometric status of boys and girls and investigated the role of various social behaviors in determining the peer status of boys and girls. Participants were 835 fourth graders from eight elementary schools serving a lower- to lower middle-class population. An unlimited nominations procedure was used in the fall and spring; children nominated peers in their grade for each of the following items: (1) liked most: (2) liked least; (3) starts fights; (4) gets in trouble; (5) someone you hang around with; (6) is a leader; and (7) plays alone and stays away from others. The number of nominations received for each child for each criterion was counted and standardized within grade. Results indicated that boys were twice as likely to be rejected and half as likely to be popular as girls. Girls were more likely to be neglected and less likely to be controversial than boys. Sixty percent of the children retained their peer status from fall to spring. Boys received higher scores for aggression and getting in trouble, and lower scores for being a prosocial leader and being withdrawn than girls. From fall to spring, antisocial behaviors increased for boys and prosocial behaviors increased for girls. Being a leader and staying away from peers were stronger determinants of social preference for boys than for girls, whereas low leadership and high stay-away scores were stronger determinants for low social preference for boys than for girls. (Six tables and 5 figures illustrate the findings.) (KDFB)

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The Role of Gender in the Behavioral Basis of Children's Sociometric Status Evaluations

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Introduction

Much of the early research of children's peer relations has focused on boys only (e.g., Coie & Kupersmidt, 1983; Dodge, 1983). Recently, researchers have begun to develop a comprehensive picture of the peer relations of girls as well, and to compare the peer relationships of girls to those of boys (e.g., Crick, 1995; Leaper, 1995; Underwood & Cowan, 1995). The purpose of this paper is to contribute to this endeavor by comparing the sociometric status of boys and girls, and by investigating the role of various social behaviors in determining the peer status of boys and girls.

In many studies of children's peer relations, sociometric methodology has been characterized in the following three ways (see Terry, in press). First, limited nomination procedures have been used to assess children's peer sociometric status. Typically, children have been asked to name three peers they like the most and three peers they like the least. Second, peer nominations have frequently been limited to same-sex choices. And third, nominations have in a number of cases been restricted to the choice of peers within the context of the classroom. As a result of these procedures, a complete picture of the peer status of boys and girls may not have been obtained. Thus, an additional goal of this study is to use a sociometric methodology that may overcome this limitation by including unlimited nominations of same-sex as well as cross-sex peers, and allowing children to select peers from all classrooms within their grade level.

Research Questions

(1) What is the distribution of sociometric status types broken down by children's gender, when based on an unlimited nominations procedure, at each of two times (Fall and Spring) during the fourth-grade school year?

(2) Are the stabilities of the sociometric status types, based on unlimited nominations, different for boys and girls?

(3) In order to validate children's sociometric status types based on unlimited nominations, behavioral differences between boys' and girls' peer status types in the Fall and the Spring of the school year are investigated.

(4) Given that the usual behavioral differences are found, the next question is whether gender might be considered a moderator of the relationship between children's behaviors and their status with peers (Baron & Kenny, 1986). That is, are certain behaviors stronger determinants for one gender than for the other? This question will be address concurrently at each of the two measurement points.

(5) The moderator question will also be considered longitudinally, by testing whether gender is a moderator of the relationship between children's social behaviors assessed in the Fall and their peer social status in the Spring of the school year.

Method

Participants were 835 fourth-grade children (417 girls and 421 boys; M age = 9.9 years) from eight elementary schools serving a lower- to lower middle-class population. Data were collected in two identical measurement waves during the Fall and the Spring of the fourth-grade school year. At each measurement wave, children participated in a sociometric interview in which they were asked to nominate as few or as many peers (boys and girls) in their grade as they wanted for each of the following items: liked most, liked least, starts fights, gets in trouble, someone you hang around with, is a leader, and plays alone and stays away from others. The number of nominations received was counted for each child for each criterion and standardized within grade. Social preference and social impact were computed, and sociometric status types were assigned according to the criteria of Coie and Dodge (1983). Table 1 presents the intercorrelations of the standardized unlimited nomination scores received at Time 1 (Fall) and Time 2 (Spring), as well as the stabilities between the Fall and the Spring of the fourth-grade school year.

Results

Question 1

Table 2 presents the frequencies of sociometric status by gender at Time 1 and Time 2. A χ^2 for the Status X Gender cross-tabulation was significant in both cases. A consistent relationship was found between gender and status. In both fall and spring, boys were twice as likely to be rejected than girls (20% vs. 10%); girls were twice as likely to be popular than boys (20% vs. 10%). Girls were also more likely to be neglected than boys (15% vs. 10%), whereas boys were more likely to be controversial than girls (10% vs. 5%). No gender difference emerged for average status.

Question 2

Two stability statistics were computed between the fall and the spring: percent agreement (percentage of children retaining their status from Time 1 to Time 2), and Cohen's κ (to correct for chance agreement) (see Table 3).

Overall, 60% of the children retained their status (κ = .43). Percent stable was equal for boys (63%) and girls (57%). Taking chance agreement into account, stability was higher for boys (κ = .47) than girls (κ = .37). This was caused by gender differences in the stability of controversial status (κ = .52 for boys; κ = .23 for girls). For all other status groups, stabilities were identical for girls and boys.

Question 3

A 2 (Gender) X 5 (Sociometric Status) X 2 (Time) repeated measures ANOVA was conducted for each behavior nomination score. The following significant effects were found:

Starts fights (Aggression)

Status:	R, C > A, P, N
Gender:	boys > girls
Status X Gender:	especially high scores for R and C boys, for girls means of status groups are closer together (Table 4)
Time X Status:	N more aggressive over time (from very low score), R less aggressive over time (from very high score), other groups no change
Time X Gender:	girls less aggressive over time, boys more aggressive over time

Gets in trouble

Status:	C, R > A, P, N
Gender:	boys > girls
Status X Gender:	especially high scores for R and C boys, for girls means of status groups are closer together (Table 5)
Time X Gender:	girls less in trouble over time, boys more in trouble over time

Hang around with (Social network involvement)

Status:	P > C > A > N, R
Time X Gender:	girls more involved in social networks over time, boys no change

Leader (Prosocial)

Status:	P > C > A, N > R
Gender:	girls > boys
Status X Gender:	especially high scores for popular and controversial girls, for boys means of status groups are closer together (Table 6)
Time X Status:	P more leaders over time, other groups no change
Time X Gender:	girls more leaders over time, boys no change

Stays away from others (Withdrawn)

Status:	R > C, N, A, P
Gender:	girls > boys
Time X Status:	R less withdrawn over time, A and P somewhat more withdrawn over time
Time X Gender:	girls more withdrawn over time, boys less withdrawn over time

Questions 4 and 5

Regression analyses were conducted to test whether gender moderated the link between behavior and peer status. Children's continuous social preference scores

Conclusions

1. Boys were more likely to be rejected or controversial. Girls were more likely to be popular or neglected. The stability of status was higher for boys than girls, due to higher stability of the controversial classification for boys.

2. Boys received higher scores for aggression and getting in trouble than girls. Girls received higher scores for prosocial behavior (leader) and being withdrawn. The latter findings may have reflected the fact that girls are less disruptive than boys in the context of the school.

3. A significant Gender X Time interaction was found for every behavior, pointing to gender specific changes in behavior during the school year. For boys, antisocial behaviors increased over time (aggression, getting in trouble). For girls, prosocial behaviors increased over time (being names as a leader, being involved in social networks).

4. Gender moderated the relationship between leader and stays away nominations and social preference. Both behaviors were stronger determinants of social preference for boys than for girls. Low leader and high stays away scores contributed stronger to low social preference for boys than for girls.

Discussion

The purpose of this paper was to address the relationship between sociometric status and gender, and investigate the behavioral basis of sociometric status evaluations of girls and boys. Boys were more likely to be rejected or controversial; girls are more likely to be popular or neglected. Sociometric status tended to be equally stable for boys and girls between the fall and spring of the school year. Boys received higher scores for antisocial behaviors, girls received higher scores for prosocial behaviors, as well as for the absence of social interaction (social withdrawal). During the course of one school year, the behaviors of boys and girls demonstrated different patterns of change. Finally, the influence of prosocial behavior and social withdrawal differed between the genders. The absence of prosocial behavior, and the presence of social withdrawal had a stronger negative effect for boys than for girls. In future research, these analyses can be extended to include a larger variety of social behavior. Note that antisocial behavior did not have a moderator function. Such a function might be found if gender-specific forms of aggression are studied (e.g., direct physical aggression vs. more indirect forms of aggression) instead of a general undifferentiated construct of aggression.

Table 1

Intercorrelations and Stabilities of Peer Nominations Based on Unlimited Nominations at Time 1 and Time 2

	Time 1						
Time 2	Liked Most	Liked Least	Starts Fights	Gets in Trouble	Hang Around With	Leader	Stays Away
Liked Most	**.83***	-.34*	-.10*	-.04	.76*	.54*	- .15*
Liked Least	-.38*	**.72***	.51*	.43*	-.24*	-.27*	.19*
Starts Fights	-.03	.47*	**.84***	.84*	.13*	-.23*	.07
Gets in Trouble	.02	.43*	.88*	**.76***	.17*	-.14*	.11*
Hang Around	.84*	-.25*	.13*	.18*	**.70***	.44*	- .17*
Leader	.67*	-.30*	-.19*	-.18*	.62*	**.68***	.12*
Stays Away	-.07*	.12*	-.13*	-.16*	-.13*	.09*	**.52***

* $p < .05$

Diagonal: Stability From Time 1 (Fall 4th Grade) to Time 2 (Spring 4th Grade)

Above Diagonal: Time 1

Below Diagonal: Time 2

Table 2

Number and Percentage of Girls and Boys Retaining Their Status From Time 1 to Time 2

	P	R	N	C	A	Total
Time 1						
Girls	82 20.4%	38 9.5%	63 15.7%	21 5.2%	198 49.3%	402
Boys	41 10.2%	84 20.8%	47 11.6%	47 11.6%	185 45.8%	404
Time 2						
Girls	76 19.3%	46 11.7%	62 15.7%	24 6.1%	186 47.2%	394
Boys	38 9.4%	82 20.4%	41 10.2%	40 9.9%	202 50.1%	403

Time 1: $\chi^2 (4) = 43.72, p < .001$
Time 2: $\chi^2 (4) = 31.64, p < .001$

Table 3

Stability Statistics (Percentage and Cohen's κ) From Time 1 to Time 2 by Gender

	Girls		Boys		Total	
Status	%	κ	%	κ	%	κ
P	57	.46	56	.51	57	.49
R	63	.59	72	.65	69	.63
N	45	.36	41	.34	43	.35
C	27	.23	57	.52	47	.42
A	63	.28	68	.37	65	.33
Overall	57	.37	63	.47	60	.43

Table 4

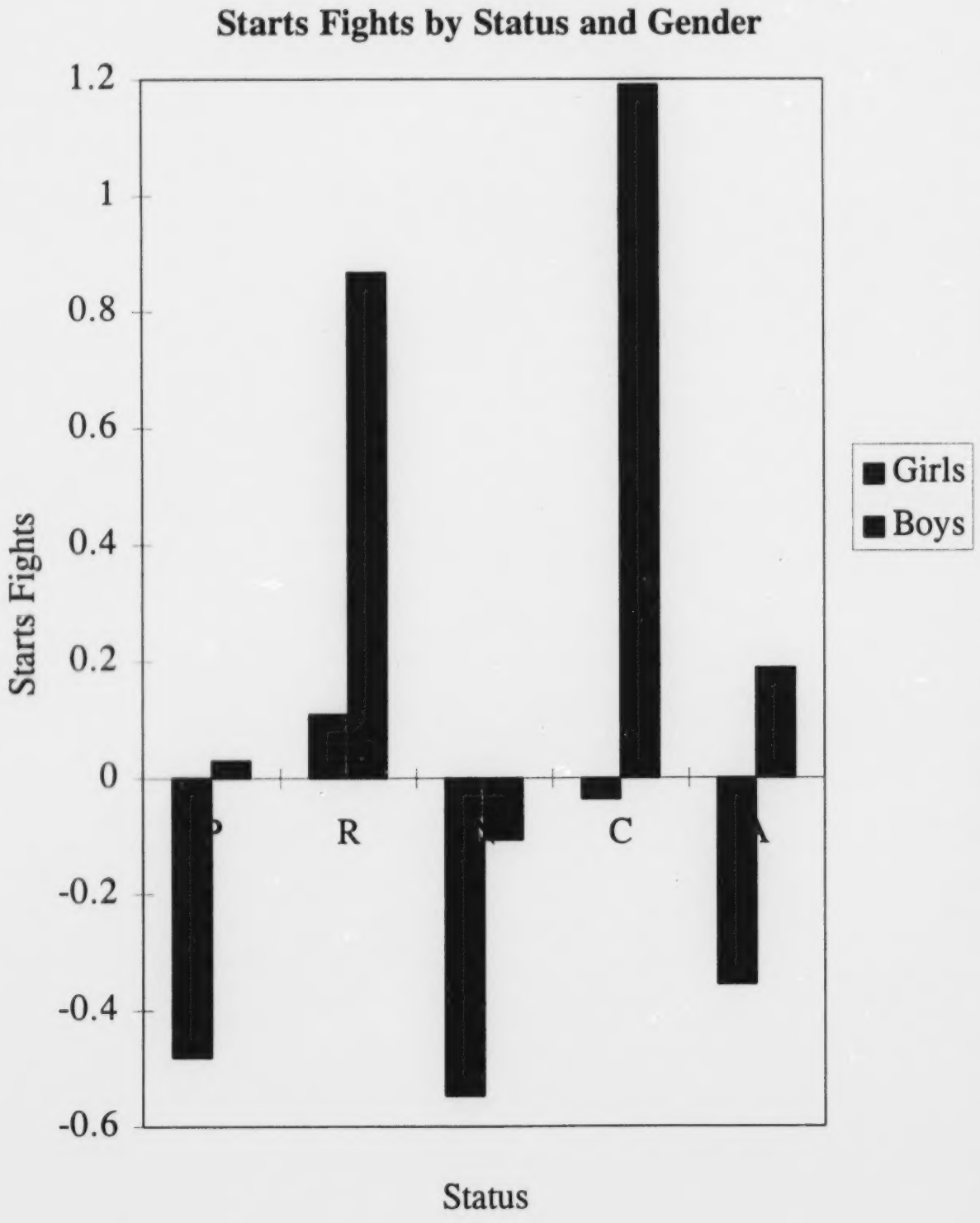
Starts Fights by Status and Gender
1.2
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
Starts Fights
R
C
Girls
Boys
Status

Table 5

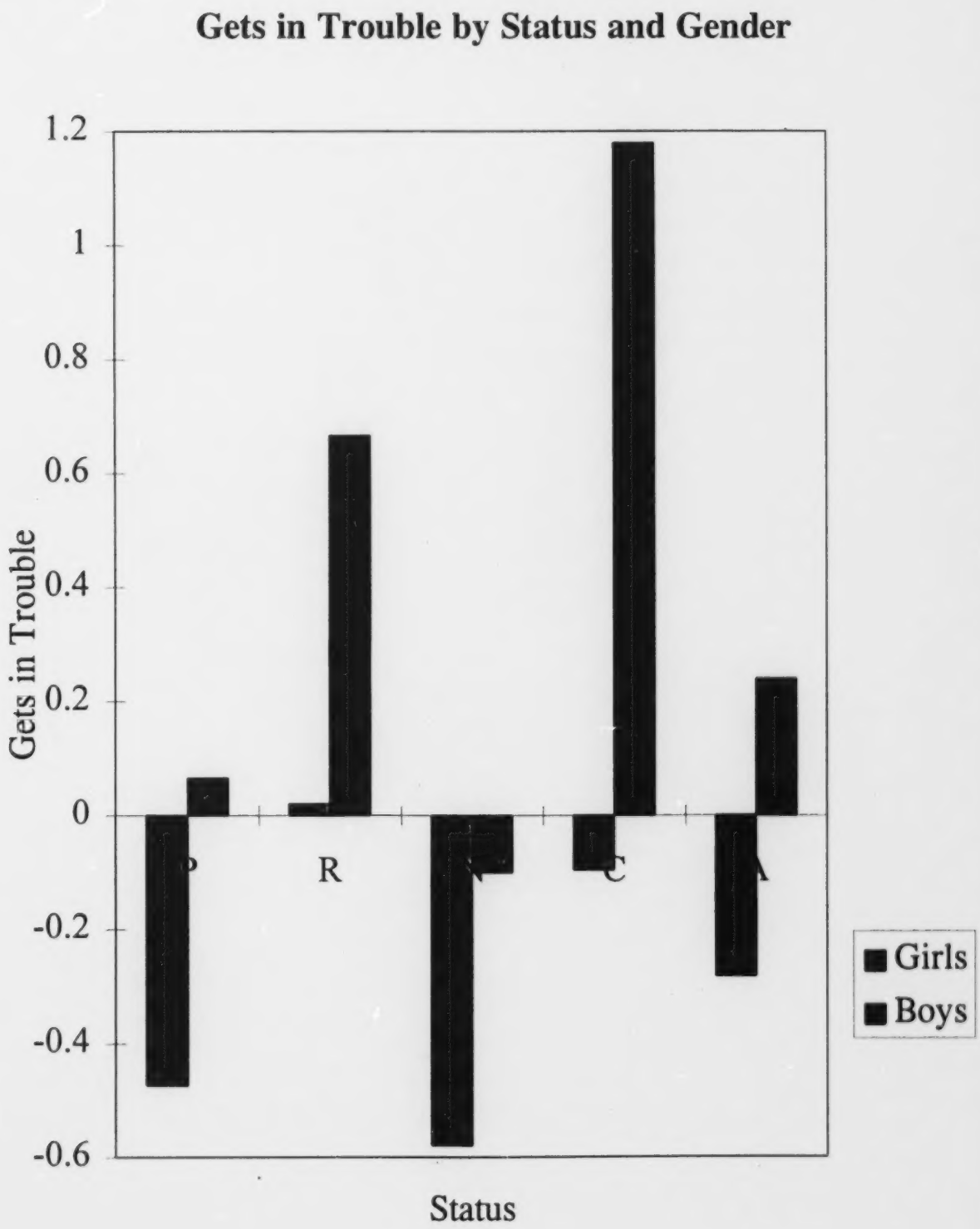
Gets in Trouble by Status and Gender
1.2
1
0.8
0.6
0.4
0.2
0
-0.2
-0.4
-0.6
Gets in Trouble
R
C
Status
Girls
Boys

Table 6

Leader by Status and Gender

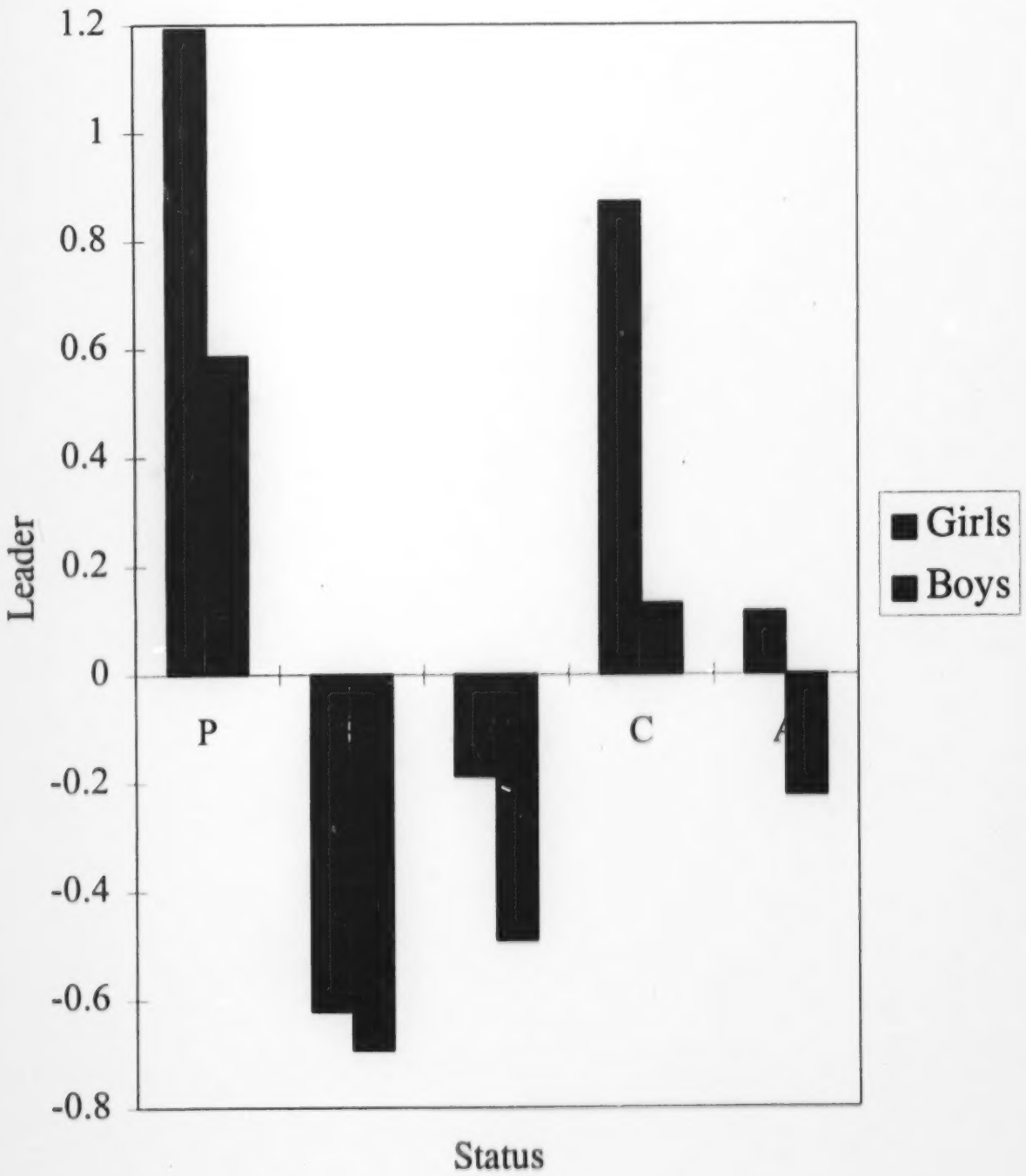

Figure 1

Relationship Among Social Preference, Gender, and Who Is a Leader

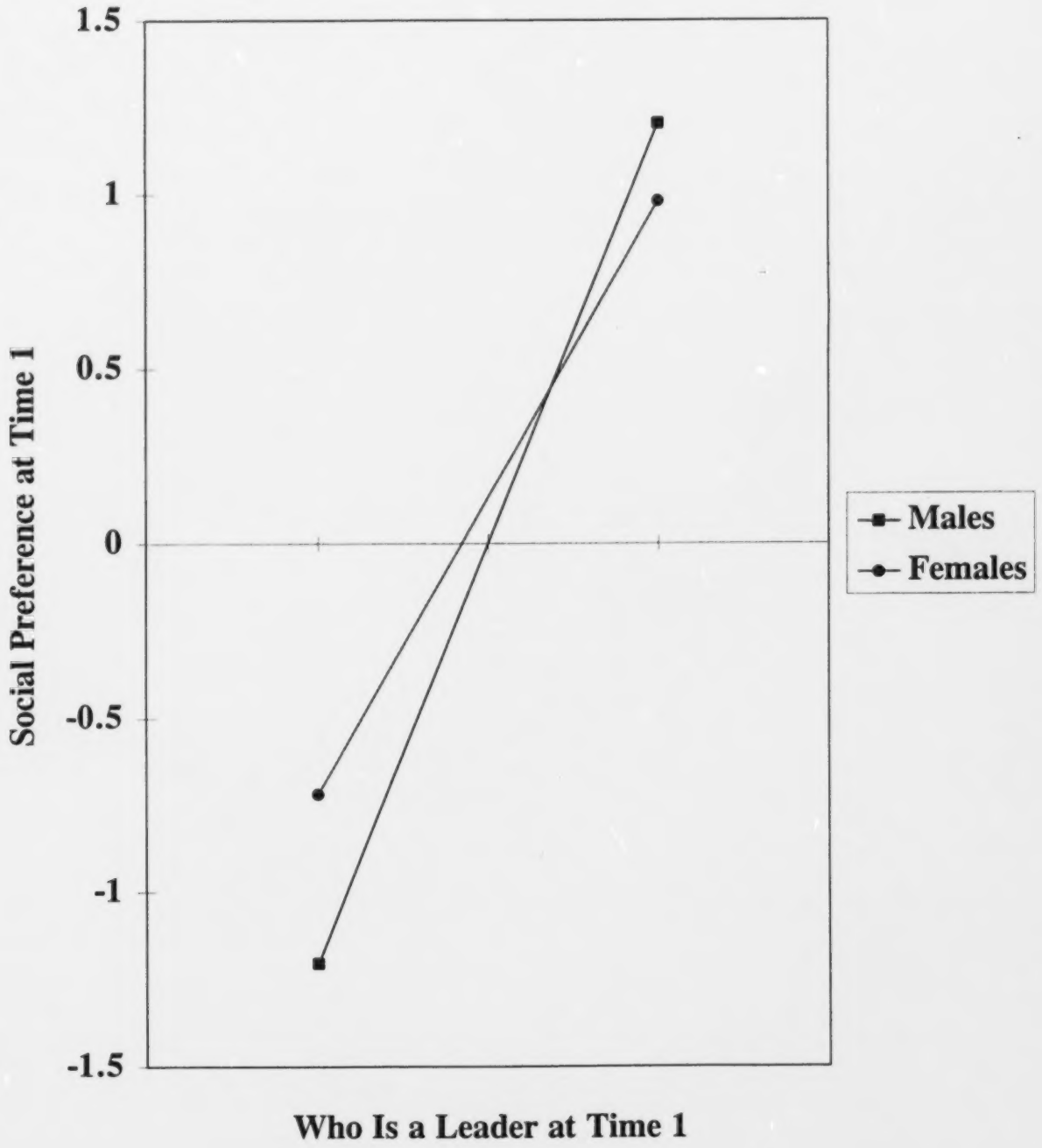

Figure 2

Relationship Among Social Preference, Gender, and Who Stays Away From Others

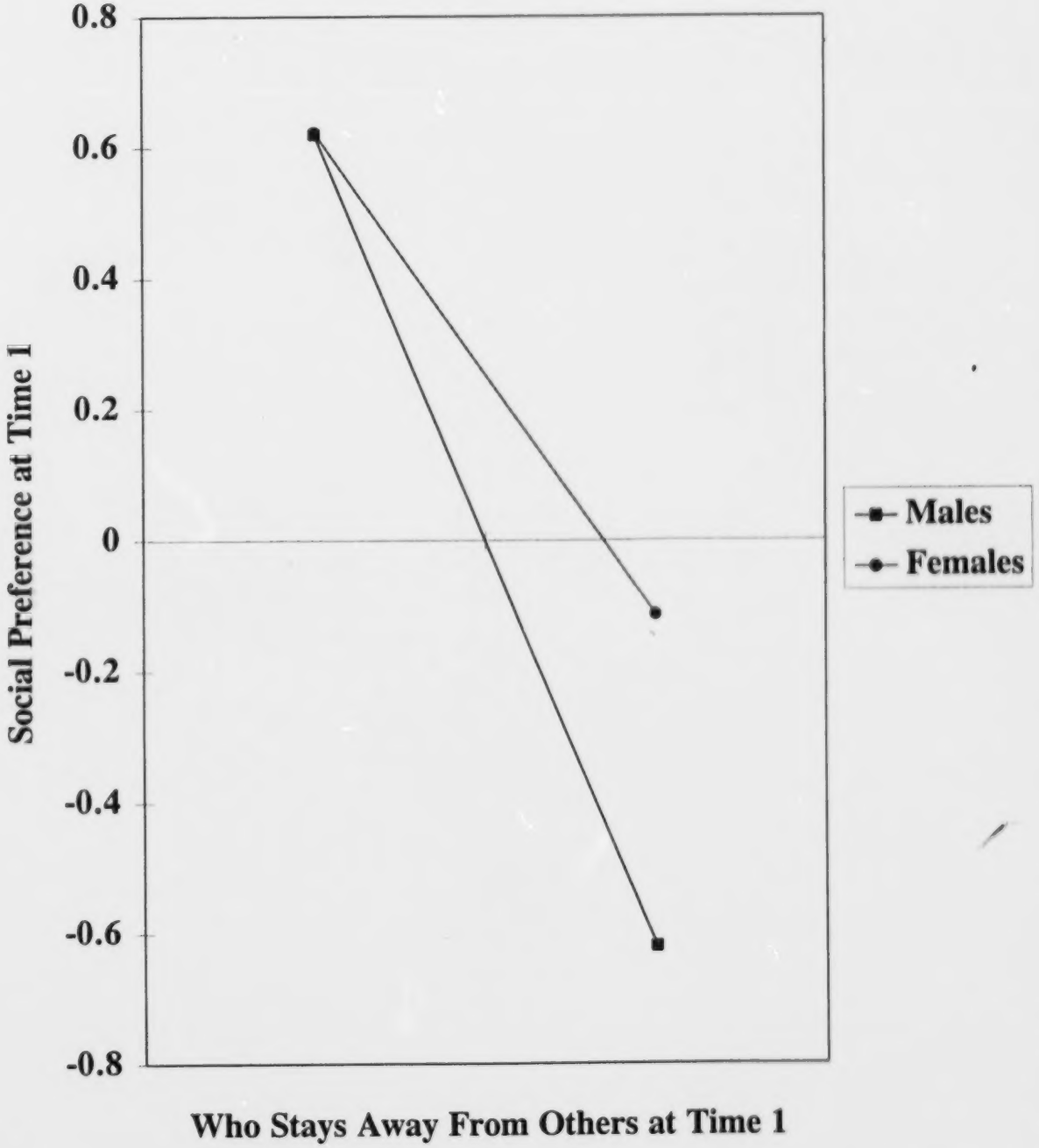

Figure 3

Relationship Among Social Preference, Gender, and Who Is a Leader

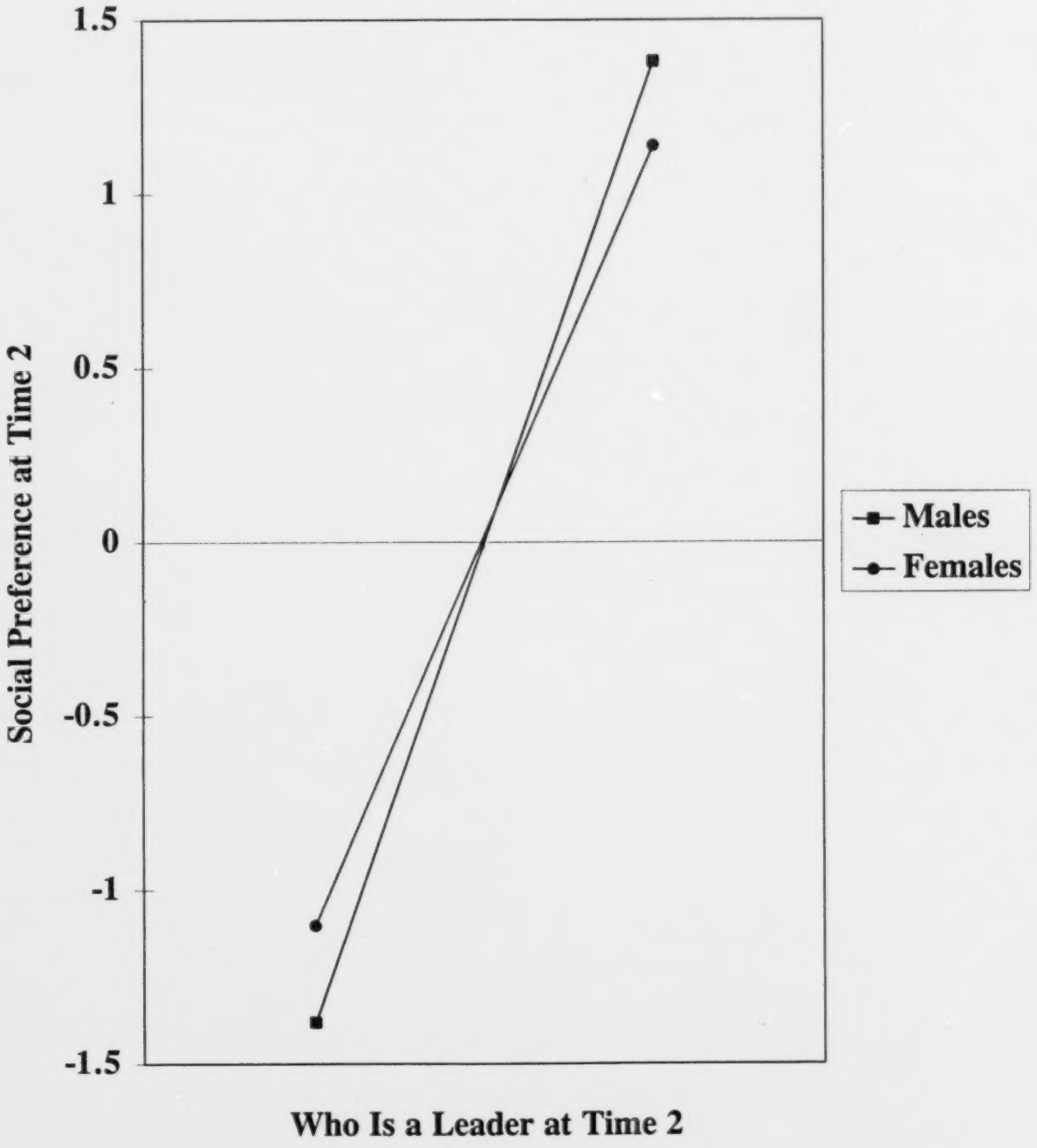

Figure 4

Relationship Among Social Preference, Gender, and Who Is a Leader

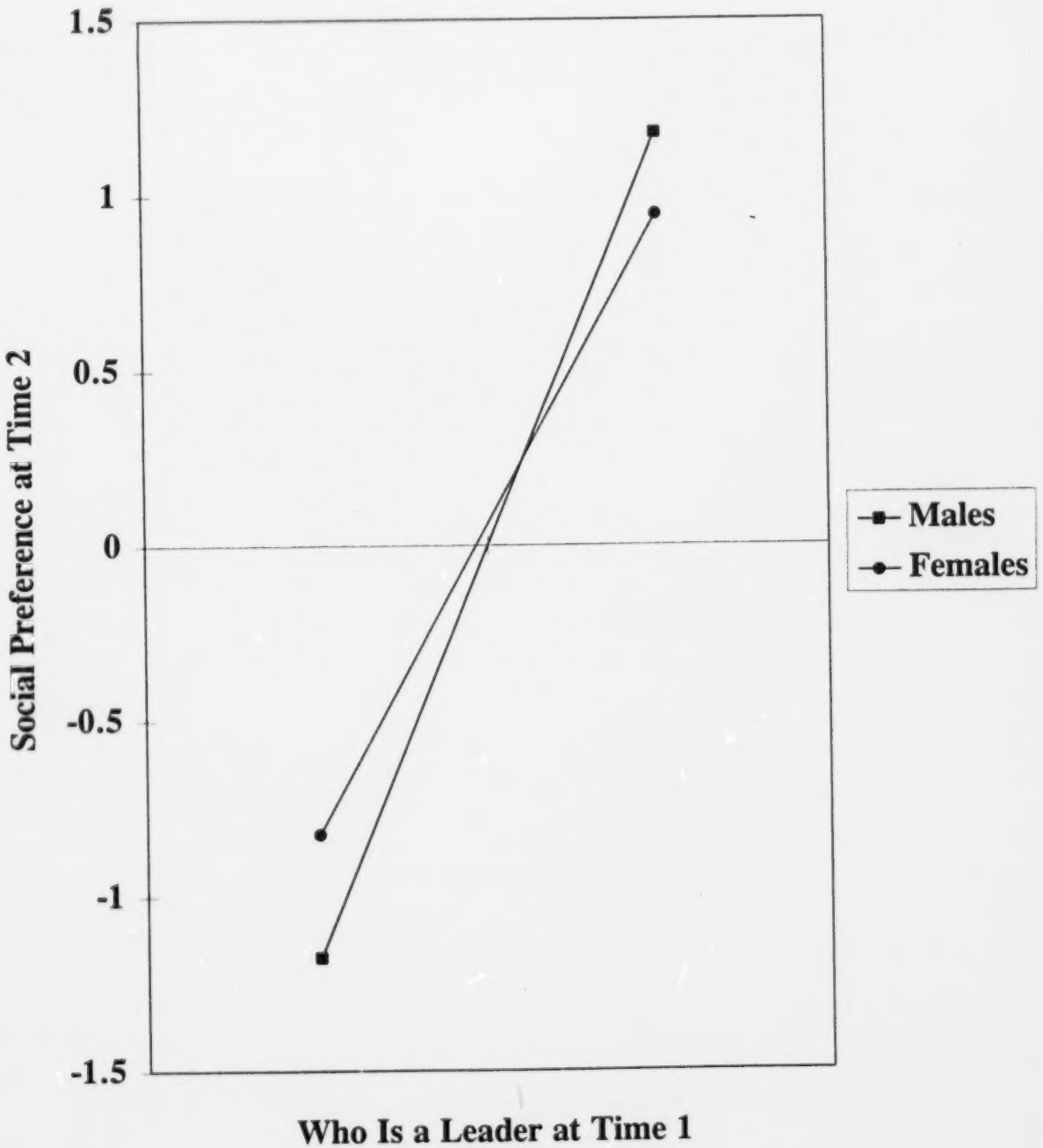

Figure 5

Relationship Among Social Preference, Gender, and Who Stays Away From Others